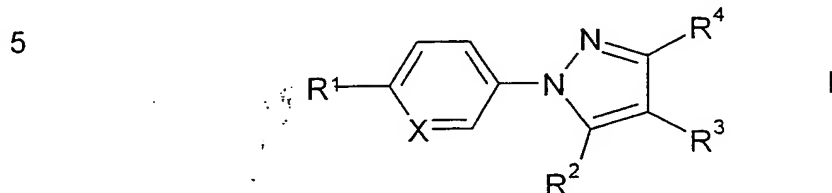


## Patent Claims

1. Use of the compounds of the formula I



10 in which

X denotes CH or N,

R¹ denotes H, A, Hal, (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms, CF<sub>3</sub>, NO<sub>2</sub>, CN, C(NH)NOH or OCF<sub>3</sub>,

R² denotes (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>Ar, cycloalkyl having 3 to 7 C atoms or CF<sub>3</sub>,

20 R³, R⁴ denote H, (CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>R⁵, (CH<sub>2</sub>)<sub>n</sub>COHet, (CH<sub>2</sub>)<sub>n</sub>CON(R⁵)<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>COO(CH<sub>2</sub>)<sub>n</sub>Het, CHO, (CH<sub>2</sub>)<sub>n</sub>OR⁵, (CH<sub>2</sub>)<sub>n</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)<sub>2</sub>, CH=N-OA, CH<sub>2</sub>CH=N-OA, (CH<sub>2</sub>)<sub>n</sub>NHOA, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)Het, (CH<sub>2</sub>)<sub>n</sub>CH=N-Het, (CH<sub>2</sub>)<sub>n</sub>OCOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>CH<sub>2</sub>OR⁵, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>CH<sub>2</sub>OCF<sub>3</sub>, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)C(R⁵)HCOOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>COHet, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>CH<sub>2</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>CH<sub>2</sub>N(R⁵)CH<sub>2</sub>COOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>CH<sub>2</sub>OR⁵, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)CH<sub>2</sub>CH<sub>2</sub>N(R⁵)<sub>2</sub>, CH=CHCOOR⁵, CH=CHCH<sub>2</sub>NR⁵Het, CH=CHCH<sub>2</sub>N(R⁵)<sub>2</sub>, CH=CHCH<sub>2</sub>OR⁵, CH=CHCH<sub>2</sub>Het, (CH<sub>2</sub>)<sub>n</sub>N(R⁵)Ar, (CH<sub>2</sub>)<sub>n</sub>N(COOR⁵)COOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(CONH<sub>2</sub>)COOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(CONH<sub>2</sub>)CONH<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>N(CH<sub>2</sub>COOR⁵)COOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(CH<sub>2</sub>CONH<sub>2</sub>)COOR⁵, (CH<sub>2</sub>)<sub>n</sub>N(CH<sub>2</sub>CONH<sub>2</sub>)CONH<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>CHR⁵COR⁵, (CH<sub>2</sub>)<sub>n</sub>CHR⁵COOR⁵, (CH<sub>2</sub>)<sub>n</sub>CHR⁵CH<sub>2</sub>OR⁵, where in each case one of the radicals R³ or R⁴ has the meaning H,

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- 5           R<sup>5</sup>       denotes H or A
- A       denotes straight-chain or branched alkyl or cycloalkyl having  
                  2 to 4 C atoms, having 1 to 10 C atoms, alkenyl having 2 to  
                  10 C atoms, alkoxyalkyl having 2 to 10 C atoms or cycloalkyl  
                  having 4 to 7 C atoms, each of which is unsubstituted or  
                  substituted by Hal or CN,
- 10          Het     preferably denotes a saturated, unsaturated or aromatic  
                  mono- or bicyclic heterocyclic radical having 1 to 15 C atoms  
                  which is unsubstituted or mono- or polysubstituted by A  
                  and/or Hal or a linear radical having 1 to 15 C atoms con-  
                  taining one or two hetero atoms,
- 15          Ar       denotes a phenyl radical which is unsubstituted or mono- or  
                  polysubstituted by A and/or Hal, OR<sup>5</sup>, OOCR<sup>5</sup>, COOR<sup>5</sup>,  
                  CON(R<sup>5</sup>)<sub>2</sub>, CN, NO<sub>2</sub>, NH<sub>2</sub>, NHCOR<sup>5</sup>, CF<sub>3</sub> or SO<sub>2</sub>CH<sub>3</sub>,
- 20          n        denotes 0, 1, 2, 3, 4 or 5
- and
- Hal     denotes F, Cl, Br or I,
- 25          and salts and solvates, enantiomers and racemates thereof for the  
                  preparation of a medicament for the treatment and prophylaxis of dis-  
                  eases which can be influenced by the binding of the compounds of  
                  the formula I to 5 HT receptors.
- 30          2.       Use of compounds according to Claim 1 and/or physiologically  
                  acceptable salts and solvates thereof for the preparation of a medica-  
                  ment having a 5-HT receptor-antagonistic action.
- 35          3.       Use of compounds according to Claim 1 or 2 and/or physiologically  
                  acceptable salts and solvates thereof for the preparation of a  
                  medicament having a 5-HT<sub>2A</sub> receptor-antagonistic action.

4. Use of compounds of the formula I according to Claim 1, 2 or 3 and/or physiologically acceptable salts or solvates thereof for the preparation of a medicament for the prophylaxis and/or treatment of psychoses, neurological disorders, amyotrophic lateral sclerosis, eating disorders, such as bulimia, anorexia nervosa, of premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder (OCD).
5. Use of the compounds of the formula I according to one or more of the preceding claims, in which  $R^1$  denotes phenyl, 2-, 3- or 4-cyano-phenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5- or 3,6-difluoro-, di-chloro- or dicyanophenyl, 3,4,5-trifluorophenyl, 3,4,5-trimethoxy- or triethoxyphenyl, thiophen-2-yl or thiophen-3-yl or 1-, 2- or 3-pyrrolyl.
6. Use of the compounds of the formula I according to one or more of the preceding claims, in which  $R^3$  denotes  $(CH_2)_nCO_2R^5$ ,  $(CH_2)_nCO-Het$ ,  $CHO$ ,  $CH_2OR^5$ ,  $(CH_2)_n-Het$ ,  $(CH_2)_nN(R^5)_2$  or  $CH=N-OA$ ,  $(CH_2)_nN(R^5)Het$ ,  $(CH_2)_nN(R^5)CH_2CH_2OR^5$ ,  $(CH_2)_nN(R^5)CH_2Het$ ,  $(CH_2)_nN(R^5)CH_2CH_2Het$ ,  $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$ ,  $CH=CHCH_2NR^5Het$ ,  $CH=CHCH_2N(R^5)_2$ ,  $CH=CHCH_2OR^5$ ,  $CH=CHCH_2Het$  or  $(CH_2)_nN(R^5)Ar$ .
7. Use of the compounds of the formula I according to one or more of the preceding claims, in which  $R^4$  denotes H.
8. Use of the compounds of the formula I according to one or more of the preceding claims, in which  $R^2$  denotes phenyl, 2-, 3- or 4-cyano-phenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-difluoro- or dicyanophenyl, thio-phen-2-yl or thiophen-3-yl, 2-, 3- or 4-pyridyl, 2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl, 2-, 4- or 5-pyrimidyl, 2- or 3-pyrazinyl, 2- or 3-furyl.
9. Use of the compounds of the formula I according to one or more of the preceding claims, in which X has the meaning CH.

10. Use of the compounds of the formula (a) to (o) according to Claim 1:
- (a) [1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]-  
(4-methylpiperazin-1-yl)amine
- 5 4-{2-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]-  
ethyl}morpholine (b)
- 4-{3-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-  
yl]allyl}morpholine (c)
- 10 1-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl-  
methyl]pyrrolidin-3-ol (d)
- 1-[1-(4'-fluorobiphenyl-4-yl)-5-(2-fluorophenyl)-1H-pyrazol-  
4-ylmethyl]-4-methylpiperazine (e)
- 1-[5-(2-fluorophenyl)-1-(4-thiophen-3-ylphenyl)-1H-pyrazol-  
4-ylmethyl]-4-methylpiperazine (f)
- 15 1-[5-furan-2-yl-1-(4-thiophen-3-ylphenyl)-1H-pyrazol-4-yl-  
methyl]-4-methylpiperazine (g)
- N<sup>1</sup>-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl-  
methyl]ethane-1,2-diamine (h)
- 20 2-{[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl-  
methyl]amino}ethanol (i)
- [1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]-  
(2-methoxyethyl)amine (j)
- 25 2-{[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl-  
methyl]methlamino}ethanol (k)
- 1-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl-  
methyl]-4-methyl-[1,4]diazepam (l)
- 30 1-[1-(4'-fluorobiphenyl-4-yl)-5-phenyl-1H-pyrazol-4-yl-  
methyl]-4-methylpiperazine (m)
- 1-[5-(2-fluorophenyl)-1-(4-pyrrol-1-ylphenyl)-1H-pyrazol-4-  
ylmethyl]-4-methylpiperazine (n)
- 35 [1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]-  
methyl-(1-methylpyrrolidin-3-yl)amine (o)

and salts and solvates thereof.